IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1 and 4-9 in accordance with the following:

1. **(currently amended)** An optical switch, comprising:

a mirror, an inclination angle of which varies depending on an application voltage;

a driver device applying the application voltage to the mirror;

an oscillation device generating an additional signal of a prescribed frequency;

a superimposition device superimposing the additional signal on the application voltage;

a detection device detecting a signal component of the prescribed frequency which appears in light reflected on the mirror when the application voltage is applied to the mirror; and

a control device ~~controlling~~ multiplying the detected signal component by the additional signal from said oscillation device to obtain a resulting signal and extracting a DC component from the resulting signal, said driver device receiving the DC component from said control device and changing the application voltage ~~based on~~ by using the ~~detected signal~~ DC component.

2. **(original)** The optical switch according to claim 1, further comprising:

a storage device storing at least one of information about the application voltage and information about optical-coupling efficiency of the optical switch; and

a notification device notifying a prescribed notification addressee of the information stored in the storage device.

3. **(original)** The optical switch according to claim 1, wherein

said oscillation device generates an additional signal of a frequency higher than a mechanical resonance frequency of said mirror.

4. **(currently amended)** An optical switch, comprising:

a mirror, an inclination angle in a first direction of which varies depending on a first application voltage and an inclination angle in a second direction of which varies depending on a second application voltage;

a first driver device applying the first application voltage to the mirror;

a second driver device applying the second application voltage to the mirror;

a first oscillation device generating a first additional signal of a first frequency;

a second oscillation device generating a second additional signal of a second frequency;

a first superimposition device superimposing the first additional signal on the first application voltage;

a second superimposition device superimposing the second additional signal on the second application voltage;

a detection device detecting respective signal components of the first and second frequencies which appear in light reflected on the mirror when the first and second application voltages are respectively applied to the mirror;

a first control device ~~controlling~~ multiplying the respective signal components by the first additional signal from said first oscillation device to obtain a first resulting signal and extracting a first DC component from the first resulting signal, said first driver device receiving the first DC component from said first control device and changing the first application voltage ~~based on the detected signal component of the first frequency~~ by using the first DC component; and

a second control device ~~controlling~~ multiplying the respective signal components by the second additional signal from said second oscillation device to obtain a second resulting signal and extracting a second DC component from the second resulting signal, said second driver device receiving the second DC component from said second control device and changing the second application voltage ~~based on the detected signal component of the second frequency~~ by using the second DC component.

5. **(currently amended)** An optical switch, comprising:

a former-stage mirror, an inclination angle in a first direction of which varies depending on a first application voltage and an inclination angle in a second direction of which varies depending on a second application voltage;

a latter-stage mirror, an inclination angle in a third direction of which varies depending on a third application voltage and an inclination angle in a fourth direction of which varies depending on a fourth application voltage;

a first driver device applying the first application voltage to the former-stage mirror;

a second driver device applying the second application voltage to the former-stage mirror;

a first oscillation device generating a first additional signal of a first frequency;

a second oscillation device generating a second additional signal of a second frequency;

a first superimposition device superimposing the first additional signal on the first application voltage;

a second superimposition device superimposing the second additional signal on the second application voltage;

a third driver device applying the third application voltage to the latter-stage mirror;

a fourth driver device applying the fourth application voltage to the latter-stage mirror;

a third oscillation device generating a third additional signal of a third frequency;

a fourth oscillation device generating a fourth additional signal of a fourth frequency;

a third superimposition device superimposing the third additional signal on the third application voltage;

a fourth superimposition device superimposing the fourth additional signal on the fourth application voltage;

a detection device detecting respective signal components of the first, second, third and fourth frequencies which appear in light reflected on the latter-stage mirror when the first and second application voltages are respectively applied to the former-stage mirror and the third and fourth application voltages are respectively applied to the latter-stage mirror; and

a first control device ~~controlling~~ multiplying the respective signal components by the first additional signal from said first oscillation device to obtain a first resulting signal and extracting a first DC component from the first resulting signal, said first driver device receiving the first DC component from said first control device and changing the first application voltage ~~based on the detected signal component of the first frequency~~ by using the first DC component;

a second control device ~~controlling~~ multiplying the respective signal components by the second additional signal from said second oscillation device to obtain a second resulting signal and extracting a second DC component from the second resulting signal, said second driver device receiving the second DC component from said second control device and changing the second application voltage ~~based on the detected signal component of the second frequency~~ by using the second DC component;

a third control device ~~controlling~~ multiplying the respective signal components by the third additional signal from said third oscillation device to obtain a third resulting signal and extracting a third DC component from the third resulting signal, said third driver device receiving the third DC component from said third control device and changing the third application voltage ~~based on the detected signal component of the third frequency~~ by using the third DC component; and

a fourth control device ~~controlling~~ multiplying the respective signal components by the fourth additional signal from said fourth oscillation device to obtain a fourth resulting signal and extracting a fourth DC component from the fourth resulting signal, said fourth driver device receiving the fourth DC component from said fourth control device and changing the fourth application voltage ~~based on the detected signal component of the fourth frequency~~ by using the fourth DC component.

6. **(currently amended)** A control device for an optical switch with a mirror, an inclination angle of which varies depending on an application voltage, comprising:

a driver device applying the application voltage to the mirror;

an oscillation device generating an additional signal of a prescribed frequency;

a superimposition device superimposing the additional signal on the application voltage;

a detection device detecting a signal component of the prescribed frequency which appears in light reflected on the mirror when the application voltage is applied to the mirror; and

a control device ~~controlling~~ multiplying the detected signal component by the additional signal from said oscillation device to obtain a resulting signal and extracting a DC component from the resulting signal, said driver device receiving the DC component from said control device and changing the application voltage ~~based on~~ by using the ~~detected signal~~ DC component.

7. **(currently amended)** A control device for an optical switch with a mirror, an inclination angle in a first direction of which varies depending on a first application voltage and an inclination angle in a second direction of which varies depending on a second application voltage, comprising:

a first driver device applying the first application voltage to the mirror;

a second driver device applying the second application voltage to the mirror;

a first oscillation device generating a first additional signal of a first frequency;

a second oscillation device generating a second additional signal of a second frequency;

a first superimposition device superimposing the first additional signal on the first application voltage;

a second superimposition device superimposing the second additional signal on the second application voltage;

a detection device detecting respective signal components of the first and second frequencies which appear in light reflected on the mirror when the first and second application voltages are respectively applied to the mirror;

a first control device ~~controlling~~ multiplying the respective signal components by the first additional signal from said first oscillation device to obtain a first resulting signal and extracting a first DC component from the first resulting signal, said driver device receiving the first DC component from said control device and changing the first application voltage ~~based on~~ by using the ~~detected signal~~ first DC component ~~of the first frequency~~; and

a second control device ~~controlling~~ multiplying the respective signal components by the second additional signal from said second oscillation device to obtain a second resulting signal and extracting a second DC component from the second resulting signal, said second driver device receiving the second DC component from said second control device and changing the second application voltage ~~based on~~ by using the ~~detected signal~~ second DC component ~~of the second frequency~~.

8. **(currently amended)** A control device for an optical switch with both a former-stage mirror, an inclination angle in a first direction of which varies depending on a first application voltage and an inclination angle in a second direction of which varies depending on a second application voltage, and a latter-stage mirror, an inclination angle in a third direction of which varies depending on a third application voltage and an inclination angle in a fourth direction of which varies depending on a fourth application voltage, comprising:

a first driver device applying the first application voltage to the former-stage mirror;

a second driver device applying the second application voltage to the former-stage mirror;

a first oscillation device generating a first additional signal of a first frequency;

a second oscillation device generating a second additional signal of a second frequency;

a first superimposition device superimposing the first additional signal on the first application voltage;

a second superimposition device superimposing the second additional signal on the second application voltage;

a third driver device applying the third application voltage to the latter-stage mirror;

a fourth driver device applying the fourth application voltage to the latter-stage mirror;

a third oscillation device generating a third additional signal of a third frequency;

a fourth oscillation device generating a fourth additional signal of a fourth frequency;

a third superimposition device superimposing the third additional signal on the third application voltage;

a fourth superimposition device superimposing the fourth additional signal on the fourth application voltage;

a detection device detecting respective signal components of the first, second, third and fourth frequencies which appear in light reflected on the latter-stage mirror when the first and second application voltages are respectively applied to the former-stage mirror and the third and fourth application voltages are respectively applied to the latter-stage mirror;

a first control device ~~controlling~~ multiplying the respective signal components by the first additional signal from said first oscillation device to obtain a first resulting signal and extracting a first DC component from the first resulting signal, said first driver device receiving the first DC component from said first control device and changing the first application voltage ~~based on~~ by using the ~~detected signal~~ first DC component ~~of the first frequency~~;

a second control device ~~controlling~~ multiplying the respective signal components by the second additional signal from said second oscillation device to obtain a second resulting signal and extracting a second DC component from the second resulting signal, said second

driver device receiving the second DC component from said second control device and changing the second application voltage ~~based on~~ by using the ~~detected signal~~ second DC component ~~of the second frequency~~;

a third control device ~~controlling~~ multiplying the respective signal components by the third additional signal from said third oscillation device to obtain a third resulting signal and extracting a third DC component from the third resulting signal, said third driver device receiving the third DC component from said third control device and changing the third application voltage ~~based on~~ by using the ~~detected signal~~ third DC component ~~of the third frequency~~; and

a fourth control device ~~controlling~~ multiplying the respective signal components by the fourth additional signal from said fourth oscillation device to obtain a fourth resulting signal and extracting a fourth DC component from the fourth resulting signal, said fourth driver device receiving the fourth DC component from said fourth control device and changing the fourth application voltage ~~based on~~ by using the ~~detected signal~~ fourth DC component ~~of the fourth frequency~~.

9. **(currently amended)** An optical switch, comprising:

a mirror, an inclination angle of which varies depending on an application voltage;

driver means for applying the application voltage to the mirror;

oscillation means for generating an additional signal of a prescribed frequency;

superimposition means for superimposing the additional signal on the application voltage;

detection means for detecting a signal component of the prescribed frequency which appears in light reflected on the mirror when the application voltage is applied to the mirror; and

control means for ~~controlling~~ multiplying the respective signal components by the additional signal from said oscillation means to obtain a resulting signal and extracting a DC component from the resulting signal, said driver means receiving the DC component from said control means and changing the application voltage ~~based on~~ by using the ~~detected signal~~ DC component.